## HELEIDAE (DIPTERA) ATTACKING BLISTER BEETLES IN MASSACHUSETTS AND ARIZONA.

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At various times during the first week of July, 1952, small swarms of flies were observed hovering over blister beetles feeding in vetch at Amherst, Massachusetts. The beetles, identified by C. A. Frost as (*Macrobasis*) *Epicauta fabricii* Lec., were obviously annoyed by the midges and crawled erratically about the foliage attempting to evade them. The flies appeared to be biting the beetles in the membranous region at the base of the antenna but those which landed on the legs or elytra were brushed off quickly.

Dr. W. W. Wirth, who examined specimens of the flies sent to him, stated in correspondence that they represent what is probably a new species of *Atrichopogon* (Heleidae). According to him, specimens of this same species were collected in Virginia associated

with the meloid, Macrobasis unicolor (Kirby).

On June 25, 1953, Dr. Wirth was able to observe another instance of this heleid-meloid relationship at Rustler Park, Chiricahua Mountains, Arizona. The beetles were identified as *Epicauta cinctipennis* Chevrolet by George Vogt. The midges attacking them proved to be *Atrichopogon* also—most likely a new species and distinct from the heleids mentioned above. All specimens collected were females. Wirth noted that a fly would alight on the plant beside a beetle and then reach over with the proboscis to pierce the coleopteron at the base of the leg. Those which attempted to alight on the beetles were repelled as the beetles scrambled away over the foliage.

Similar reports regarding this association have been reported by other workers, among them Kieffer (1922), Edwards (1923), and Blair (1937, 1938).

## REFERENCES

Blair, K. G. 1937. Midges attacking Meloe Beetles. Ent. Mo. Mag. 73: 143.

don Ent. and Nat. Hist. Soc. Proc. & Trans. 1937–1938, pp. 84–85.

- Edwards, F. W. 1923. New and old observations of Ceratopogonine midges attacking other insects. Ann. Trop. Med. & Parasit. 17: 19-29.
- Kieffer, J. J. 1922. Nouveaux Chironomides piqueurs habitant l'Algérie. Arch. Inst. Pasteur Afr. Nord 2: 494-518.